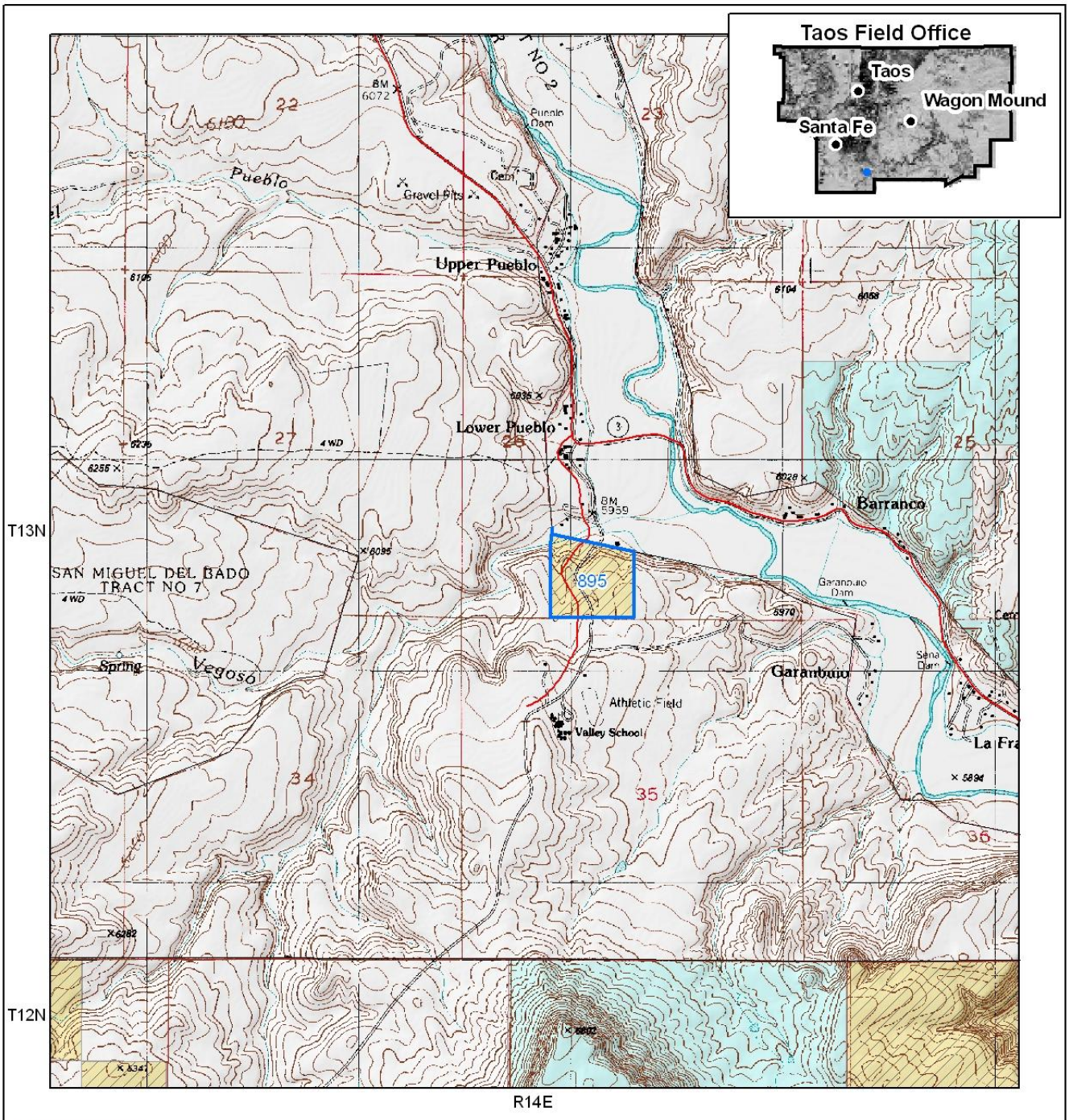
Allotment Evaluation (AE)
For
Garanbuio Allotment (#895)

Permittee		Authorization Number 3022090		
Livestock Use	Preference AUMs	Allotment 00895	Active 4	Suspended 0
	Period of Use	Allotment Garanbuio Allotment	Kind 1 Cattle	Season of Use 03/01 - 02/28
	Kind of Livestock	cow/calf		
	Percent Public Land	AUMs are authorized at 100% public land		
Allotment Profile	Physical Description	Allotment 895 is located approximately 1 mile south of Lower Pueblo, in San Miguel County, New Mexico. Elevation on this allotment is roughly between 5,850 and 5,950 feet. Landforms on the allotment include; rolling hills. Two soil types are identified within the federal lands in this allotment. They include: Tuloso-Rock outcrop-Sombordoro association, steep. These soils consist of stony sandy and stony loams with rooting depths ranging from 8 to 20 inches. Parent materials are primarily derived from sandstone. Average annual precipitation is about 16 inches. Vegetation is characterized by pinyon, juniper, blue grama, hairy grama, sideoats grama, little bluestem and pinyon ricegrass. Vibo-Ribera association, undulating. These soils consist of sandy loams, with rooting depths over 60 inches. Parent materials of alluvial and eolian material derived from mixed sources comprise these soils. Average annual precipitation ranges between 16 and 20 inches. Vegetation is characterized by pinyon, juniper, blue grama, sideoats grama, little bluestem, pinyon ricegrass and Indian ricegrass.		
	Land Status Acreage	BLM 37	State 0	Private 0
	Management Objectives	The allotment is under a 'Custodial' ('C') management category. 'C' category allotments have evidence of a "not apparent" to "upward" long term trend, have no significant resource conflicts and have a low potential for improvement in vegetative production.		
	Key Forage Species	blue grama, hairy grama, sideoats grama and little bluestem		
	Grazing System	Generally used during calving - March or April		
Management Evaluation	Actual Use	Actual use has not been reported and figures below were determined from paid bill reports.		

		AUMs **Year** 12 2007 12 2006 12 2005 12 2004 12 2003 12 2002 12 2001 12 2000 12 1999 12 1998
	Utilization	Due to the lack of staff utilization studies have not been conducted. During the assessment visit it was determined that the allotment receives very light grazing to no grazing.
	Climate	The past water year (Oct. 1, 2007 – Sept. 30, 2008) the average temperature has been nearly average (-1 to 0 degrees Fahrenheit below average) and precipitation has been below average (-3 to -2 inches below average). This should provide below average plant growth on warm season plants and cool season plants. During the past 10 years (1998-2007) the temperature has been at or above average and precipitation has been fluctuating annually, but it is important to note that between 2000 and 2004 the 12 month running average was below the annual average. (Based on the Northern Mountains Climate Division, New Mexico from the Western Regional Climate Center.) Climate change is a concern not only in New Mexico but globally. "Effects of increasing atmospheric CO_2 levels on plants are predicted to cause dramatic changes in native vegetation. Global climate change may accelerate rates of plant extinction, while ecosystem structure and function may shift. Ecological response to global changes in climate could shift ecosystems (i.e., shrublands replacing grasslands) and have effects, not only to an individual species, but to the ecosystem itself by additions and deletions of vegetation species" (Johnson, H.B., and H.S. Mayeux. 1992. Viewpoint: A view on species additions and deletions and the balance of nature. Journal of Wildlife Management 45:322-333.) We anticipate that our monitoring efforts will help indicate vegetation shifts, allowing for management modifications to address global climate change.
	Trend	No long term trend plots have been established on this allotment. A Rangeland Health Matrix was completed on June 19, 2008. The actual survey forms are available within the allotment file. Below is a summation of the information gathered by the survey. Within the Rangeland Health Attributes are three different categories of indicators. The categories include; Soil and Site Stability, Hydrologic Function and Biotic Integrity. The percent

		of indicator score was created by multiplying an assigned value for departure from site descriptions/reference areas by the number of indicators at the level. Departure scores are categorized as: none to slight = 5, slight to moderate = 4, moderate = 3, moderate to extreme = 2 and extreme = 1. For example, if all indicators under Soil/Site Stability were rated none to slight (best condition), the equation would be 5(score)*10indicators=50/50*100 = 100% similarity, or what is expected based on an Ecological Site Description. Standards for each individual category are met when they are rated Proper Functioning Condition or Functioning at Risk-Upward Trend. Not meeting standards are ratings of; Functioning at Risk-Static, Functioning at Risk-Downward Trend and Non Functional. Soil and Site Stability Two indicators were deemed None to Slight, four were deemed Slight to Moderate and four were deemed Moderate. Rating: 76% Hydrologic Function Three indicators were deemed None to Slight, four were deemed Slight to Moderate and three were deemed Moderate. Rating: 80% Biotic Integrity Five indicators were deemed None to Slight while four were deemed Slight to Moderate. Rating: 91% Overall Rating: 82% Soils were rated at Functioning at Risk-Static, Biotic Flora was rated at Functioning at Risk-Static and Biotic Fauna was rated at Functioning at Risk-Static. Current livestock does not appear to be adversely affecting this allotment. No recent livestock grazing evidence was found. Some of the lower ratings to Soils and Hydrologic Function can be directly attributed to State Road 3 dissecting the allotment.
	Riparian	There are no riparian areas within this allotment.
	Wildlife	Seasonal home ranges in the allotment include those for elk, deer, mountain lion, black bear, bobcat, fox, coyote, small mammals, bats, raptors, turkey vulture, songbirds, and a variety of insects. Elk and deer are grazers/browsers; however there is little dietary overlap between deer and cattle. Best management practices i.e. rotational grazing would ensure that forage production within this area can support both wildlife and livestock on a sustained basis.
	Threatened and	It is determined that there are no federally listed threatened or

	Endangered Species	endangered species likely to be found in the subject allotment. There is no designated critical habitat for any species listed by the USFWS within the allotment.
Conclusions and Recommendations		The vegetation is in good condition with good diversity. It is recommended that at least minimal monitoring be established on the allotment to determine trend. It is recommended that the lease be renewed for the next ten years without any changes.



Garanbuio Allotment (895)

0 0.125 0.25 0.5 0.75 1 Miles

N W E S

Legend

- Allotment Boundary
- Bureau of Land Management
- Private
- State

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Friday, December 18, 2008

7.5' Topos: Sena